

Claims

I claim:

1. A medication dosage conversion device for easily and accurately determining the amount of medication to be administered to a patient based upon a prescribed dosage which is in different units from the units in which the medication is supplied; wherein said device comprises:

- a) means for entering input data wherein said input data includes the form of the medication to be administered, the prescribed dosage, and the units in which the medication is supplied;
- b) computation means for converting the input data into information regarding the amount of the medication to administer to the patient; and
- c) a display screen;

wherein said device converts the input data into output information providing the amount of medication to deliver, and wherein said output information is shown on said display screen.

2. The device, according to claim 1, wherein said device is portable.

3. The device, according to claim 2, wherein said device is handheld.

4. The device, according to claim 1, which is mounted at a nurse's station or in a patient's room.

5. The device, according to claim 1, wherein said input means is selected from the group consisting of touch screens, voice recognition, and keypads.

6. The device, according to claim 1, wherein said display screen comprises a liquid crystal display.

7. The device, according to claim 1, wherein said computation means computes dosage amounts for at least two dosage forms of medication.

8. The device, according to claim 7, wherein the dosage forms include solid and liquid dosage forms.

9. The device, according to claim 1, wherein said display screen displays numbers and letters corresponding to input data and output information.

10. The device, according to claim 1, wherein said means for entering input data comprises:

- a) a first set of keys for entering a form of medication;
- b) a second set of keys for entering a unit of dosage of a medication as supplied;
and
- c) a third set of keys for entering a prescribed dosage of the medication.

11. The device, according to claim 10, wherein said first set of keys comprises keys for selecting one of the following:

- a) tablets or capsules;
- b) orally-consumed liquids; and
- c) intravenous fluids.

12. The device, according to claim 10, wherein said second set of keys comprises at least two of the group consisting of:

- a) a mg/tablet or mg/capsule key;
- b) a grain/tab key;
- c) a grain to mg converter key;
- a) an oral liquids mg key;
- b) an oral liquids ml key;
- c) a vial units key;
- d) a vial ml key; and
- e) a total volume in ml key.

13. The device, according to claim 10, wherein said third set of keys comprises at least two of the following:

- a) a mg key;
- b) a units key;
- c) an hours to administer key; and
- d) a drop factor key.

14. The device, according to claim 13, wherein said device comprises keys with an embedded function for automatically providing the number of drops to be administered for intravenous administration.

15. The device, according to claim 14, with keys corresponding to 10, 15 and 60 drops.

17. The device, according to claim 1, wherein said calculator keypad further performs numeric computations.

18. The device, according to claim 1, wherein said computation means comprises software for converting said input data to said output information.

19. A handheld programmable electronic device capable of having software installed into said programmable electronic device, wherein said programmable electronic device is a personal digital assistant or a computer; and wherein said device, having said installed software, easily and accurately determines the amount of medication to be administered to a patient based upon a prescribed dosage which is in different units from the units in which the medication is supplied.

*20. A method for easily and accurately determining the amount of medication to be administered to a patient based upon a prescribed dosage which is in different units from the units in which the medication is supplied; wherein said method comprises:

- a) receiving first input data indicative of the known form of medication to be administered,
- b) receiving second input data indicative of the standard pharmaceutical unit to be calculated,
- c) receiving third input data values of physician-prescribed variables,
- d) computing the previously selected standard pharmaceutical unit for administration to the patient, and
- e) displaying the amount of medication to be administered to the patient.

21. The method, according to claim 20, wherein said input data is received in steps (a) – (c) by an input means is selected from the group consisting of touch screens, voice recognition, and keypads.

22. The method, according to claim 20, wherein the step of displaying the amount of medication comprises displaying said amount on a liquid crystal display.

23. The method, according to claim 20, wherein step (d) further comprises computing dosage amounts for at least two dosage forms of medication.

24. The method, according to claim 23, wherein said step of computing dosage amounts comprises computing the dosage forms include solid and liquid dosage forms.

25. The method, according to claim 20, wherein said step of displaying comprises displaying numbers and letters corresponding to input data and output information.

26. The method, according to claim 20, wherein said input data is received in steps (a) – (c) by:

- a) a first set of keys for entering a form of medication;

- b) a second set of keys for entering a unit of dosage of a medication as supplied; and
- c) a third set of keys for entering a prescribed dosage of the medication, respectively.

27. The method, according to claim 26, wherein said first set of keys comprises keys for selecting one of the following:

- a) tablets or capsules;
- b) orally-consumed liquids; and
- c) intravenous fluids.

28. The method, according to claim 26, wherein said second set of keys comprises at least two of the group consisting of:

- a) a mg/tablet or mg/capsule key;
- b) a grain/tab key;
- c) a grain to mg converter key;
- f) an oral liquids mg key;
- g) an oral liquids ml key;
- h) a vial units key;
- i) a vial ml key; and
- j) a total volume in ml key.

29. The method, according to claim 20, wherein said third set of keys comprises at least two of the following:

- a) a mg key;
- b) a units key;
- c) an hours to administer key; and
- d) a drop factor key.

30. The method, according to claim 29, further comprising the step of automatically providing the number of drops to be administered for intravenous administration.

31. The method, according to claim 30, further comprising receiving input data via keys corresponding to 10, 15 and 60 drops.

32. The method, according to claim 20, further comprising performing additional numeric computation via a calculator keypad

↓ 33. A computer readable medium containing program instructions for execution on a computer system, a portable device, or a handheld device which when executed by the computer, portable device, or handheld device cause the computer, portable device or handheld device to perform a method for easily and accurately determining the amount of medication to be administered to a patient based upon a prescribed dosage which is in different units from the units in which the medication is supplied; wherein said method comprises:

a) receiving first input data indicative of the known form of medication to be administered,

b) receiving second input data indicative of the standard pharmaceutical unit to be calculated,

c) receiving third input data values of physician-prescribed variables,

d) computing the previously selected standard pharmaceutical unit for administration to the patient, and

e) displaying the amount of medication to be administered to the patient.